# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Nikolaus Farber, et al. § Group Art Unit: 2614

Application No. 10/512,103 § Examiner: Fahnert, Friedrich

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Customer No.: 27045

For: Bypassing Transcoding Operations in a Communication Network

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# APPEAL BRIEF SUBMITTED UNDER 35 U.S.C. §134

This Appeal Brief is submitted to appeal the decision of the Primary Examiner set forth in a Final Official Action dated November 9, 2009, finally rejecting claims 1-18 and 20-24, and an Advisory Action dated February 17, 2010, maintaining the claim rejections.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §41.20(b)(2), and to credit any overpayment, to Deposit Account No. 50-1379.

# Real Party in Interest

The real party in interest, by assignment, is: Telefonaktiebolaget LM Ericsson (publ)

SE-164 83

Stockholm, Sweden

## Related Appeals and Interferences

None

# Status of Claims

Claims 19 and 25-28 were previously cancelled and are not appealed; claims 1-18 and 20-24 remain pending. Claims 1-5, 7-18, and 20-24 stand rejected as being unpatentable over Tseng, et al. (U.S. Patent No. 6,172,974) in view of Tso, et al. (U.S. Patent No. 6,421,733); and, claim 6 stands rejected as being unpatentable over Tseng in view of Tso and Shaffer, et al. (U.S. Patent No. 6,324,409).

## Status of Amendments

The claims set out in the Claims Appendix include all entered amendments. No amendment has been filed subsequent to the final rejection.

# Summary of Claimed Subject Matter

Claim Element	Specification Reference
A method of initiating the bypassing of a pair of transcoding operations performed in series by a first transcoder arranged together with a first communication terminal on a local side of a communication network and by a second transcoder arranged together with a second communication terminal on a distant side of the communication network, said method comprising the steps of:	
receiving by the first transcoder arranged with the first communication terminal on a local side of a communication network from the second transcoder arranged with the second communication terminal on the distant side, in a first initial request to bypass	
transcoding operations, information about an encoding format currently in use by the second communication terminal on the distant side and about encoding capabilities of the second communication terminal distant side, including the version of the bypassing protocol supported by the respective transcoder; and,	Figure 5
transmitting by the first transcoder	Page 16, line 29, et seq.

arranged with the first communication terminal to the second transcoder arranged with the second communication terminal on the distant side, in a second initial request to bypass transcoding operations, information about an encoding format currently in use by the first communication terminal on the local side and about encoding capabilities of the first communication terminal on the local side, the information about the encoding capabilities including the version of a bypassing protocol supported by the respective transcoder, to enable on one or on both sides a change of the encoding format currently in use prior to initiating the bypassing of the transcoding operations.

Figure 8: TFO\_REQ (AMR, NB\_ACS, Ver, AMR-WB) from TRAU(loc) to TC(dis)

Page 14, line 16, et seq. Figure 5

Page 17, line 5, et seg.

## Claim Element

# 20. A device for processing signals in context with the initiation of the bypassing of a pair of transcoding operations performed in series by a first transcoder arranged together with a first communication terminal on a local side of a communication network and by a second transcoder arranged together with a second communication terminal on a distant side of the communication network, said device comprising:

Specification Reference

Figure 8; TRAU or TC Page 14, line 9, et sea.

a component for receiving information, in a first initial request to bypass transcoding operations, about an encoding format currently in use by the second communication terminal on the distant side and about encoding capabilities of the second communication terminal on the distant side, including the version of the bypassing protocol supported by the respective transcoder: and.

a component for transmitting figure 8: information, in a second initial request to bypass transcoding operations, about an encoding format currently in use by the first terminal on the local side and about encoding capabilities of the first terminal on the local side, the information about the encoding capabilities of the first terminal including the Figure 5.

version of a bypassing protocol supported by

Page 16, line 29, et seq.
Figure 8: TFO\_REQ from TC(dis) to TRAU(loc) or vice versa

Page 14, line 16, et seq. Figure 5

Figure 8: TFO\_REQ (AMR, NB\_ACS, Ver, AMR-WB) from TRAU(loc) to TC(dis) or vice versa

Page 14, line 16, et seq. Figure 5

its respective transcoder, to enable on one or on both sides a change of the encoding format currently in use prior to initiating the bypassing of the transcoding operations.	
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The specification references listed above are provided solely to comply with the USPTO's current regulations regarding appeal briefs. The use of such references should not be interpreted to limit the scope of the claims to such references or to limit the scope of the claimed invention in any manner.

# Grounds of Rejection to be Reviewed on Appeal

- Whether claims 1-5, 7-18, and 20-24 are unpatentable over Tseng, et al. (U.S. Patent No. 6,172,974) in view of Tso, et al. (U.S. Patent No. 6,421,733); and,
- Whether claim 6 is unpatentable over Tseng in view of Tso and Shaffer, et al. (U.S. Patent No. 6,324,409).

## Arguments

# 1.) Claims 1-5, 7-18 and 20-24 Are Patentable Over Tseng In View Of Tso

In the Final Office Action dated November 9, 2009, the Examiner rejected claims 1-5, 7-18 and 20-24 as being unpatentable over Tseng, et al. (U.S. Patent No. 6,172,974) in view of Tso, et al. (U.S. Patent No. 6,421,733). In a Non-Final Office Action dated March 17, 2009, the Examiner first rejected those claims as being anticipated by Tseng. In Applicants' response to that office action, filed on July 17, 2009, it was noted that Tseng does not disclose the pertinent claim elements of:

receiving by the first transcoder . . . in a first initial request . . . information . . . including the <u>version</u> of the bypassing protocol supported by the respective transcoder; and,

transmitting by the first transcoder . . . in a second initial request to bypass transcoding operations, information . . . about the encoding capabilities *including the <u>version</u> of a bypassing protocol* . . . to enable . . . a change of the encoding format currently in use *prior to initiating the bypassing of the transcoding operations*. (emphasis added)

Although the teachings of Tseng do relate to transcoding, and tandem free operation, Tseng does not teach including the <u>version</u> of a bypassing protocol in initial request messages to bypass transcoding operations.

In the Final Office Action dated November 9, 2009, the Examiner asserted that "Applicant's arguments filed July 17, 2009 have been fully considered but they are not persuasive." The Examiner's rejections in the final office action, however, were based on the teachings of Tseng combined with newly-asserted teachings of Tso. Tso, however, also fails to teach that which the Examiner asserts.

In the Non-Final Office Action dated March 17, 2009, the Examiner asserted that:

Claim 1 "is anticipated by Tseng et al. where a method is presented to perform the bypassing of a pair of transcoders one on the local side the other at the distant side of the communication network (column 5, line 62-67, column 6, line 1-5).

That was the complete extent of the Examiner's stated basis for substantively rejecting claim 1; the Examiner did not independently identify where each element/limitation of claim 1 is taught in Tseng. Of critical importance, however, the Examiner acknowledged in the Final Office Action that "Tseng does not address the version of the transcoder (or the bypassing protocol)." (emphasis added) To overcome the acknowledged deficiency of Tseng, the Examiner looked to the teachings of Tso. Tso, however, also fails to teach that which the Examiner asserts.

After acknowledging in the Final Office Action that Tseng "does not address the version of the transcoder (or the bypassing protocol)," the Examiner stated that Tso:

"discloses that different transcoded <u>version of the hypertext object</u>, which may be retrieved or appended to by one of transcode service providers (col. 5, lines 24-25). Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to add in the invention of Tseng the limitations as explicitly describe by Tso et al., in order to provide a version of the transcoder." (emphasis added)

The portion of Tso referenced by the Examiner relates to a "transcoded version of [a] hypertext object." In other words, Tso is discussing a version of a <u>hypertext object</u> that has been transcoded; it has nothing to do with initiating the bypassing of a pair of transcoding operations performed in series, much less the inclusion of the version of a bypass protocol in initial request messages to bypass transcoding operations, as such

technical terms are utilized in claim 1. It appears that the Examiner is merely picking and choosing technical terms found in Applicants' claims from the prior art, without any regard as to the functions of the claim elements or the purpose of the claimed invention as a whole. Furthermore, the Examiner does not provide any rationale for why one of ordinary skill in the art would consider the teachings of Tseng and Tso, in combination, if attempting to solve the technical problem addressed by Applicants' invention, which is to bypass a pair of transcoding operations performed in series by a first transcoder arranged together with a first communication terminal on a local side of a communication network and by a second transcoder arranged together with a second communication terminal on a distant side of the communication network. The Examiner has merely pointed to a single sentence in Tso that has nothing to do with the stated element of Applicants' claim, much less the function of the element or the purpose of the claim as a whole. Therefore, the Examiner has not established a prima facie case of obviousness of claim 1.

Whereas independent claim 20 recites limitations analogous to those of claim 1, it is also patentable over the teachings of Tseng and Tso. Furthermore, whereas claims 2-5 and 7-18 are dependent from claim 1 and claims 21-24 are dependent from claim 20, and include the limitations of their respective base claims, they are also not obvious in view of those references.

# 2.) Claim 6 Is Patentable Over Tseng In View Of Tso and Shaffer

The Examiner has rejected claim 6 as being unpatentable over Tseng, et al. (U.S. Patent No. 6,172,974) in view of Tso, et al. (U.S. Patent No. 6,421,733) and Shaffer, et al. (U.S. Patent No. 6,324,409). As established supra, claim 1 is not obvious over Tseng in view of Tso. The Examiner has not pointed to any teaching in Shaffer that would overcome the identified deficiencies in those teachings and, therefore, claim 1 is not obvious over Tseng in view of Tso and Shaffer. Thus, whereas claim 6 is dependent from claim 1, and includes the limitations thereof, it is also not obvious in view of those references.

## CONCLUSION

The claims currently pending in the application are patentable over the cited references and, therefore, the Applicants request that the Examiner's claim rejections be reversed and the application be remanded for further prosecution.

Respectfully submitted.

Roger S. Burleigh Registration No. 40.542

Ericsson Patent Counsel

Date: \_\_April 26, 2010\_\_\_\_\_

Ericsson Inc. 6300 Legacy Drive, M/S EVR1 C-11 Plano, Texas 75024

(972) 583-5799 roger.burleigh@ericsson.com

### CLAIMS APPENDIX

1. (Previously Presented) A method of initiating the bypassing of a pair of transcoding operations performed in series by a first transcoder arranged together with a first communication terminal on a local side of a communication network and by a second transcoder arranged together with a second communication terminal on a distant side of the communication network, said method comprising the steps of:

receiving by the first transcoder arranged with the first communication terminal on a local side of a communication network from the second transcoder arranged with the second communication terminal on the distant side, in a first initial request to bypass transcoding operations, information about an encoding format currently in use by the second communication terminal on the distant side and about encoding capabilities of the second communication terminal distant side, including the version of the bypassing protocol supported by the respective transcoder; and.

transmitting by the first transcoder arranged with the first communication terminal to the second transcoder arranged with the second communication terminal on the distant side, in a second initial request to bypass transcoding operations, information about an encoding format currently in use by the first communication terminal on the local side and about encoding capabilities of the first communication terminal on the local side, the information about the encoding capabilities including the version of a bypassing protocol supported by the respective transcoder, to enable on one or on both sides a change of the encoding format currently in use prior to initiating the bypassing of the transcoding operations.

- (Previously Presented) The method of claim 1, further comprising the step of deciding about the change of the encoding format even if compatible encoding formats are currently used on both sides.
- 3. (Previously Presented) The method of claim 1, wherein the information on the encoding capabilities of the second communication terminal on the distant side is used to determine an alternative encoding format that is supported on both the first communication terminal on the local and the second communication terminal on the

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distant side

4. (Original) The method of claim 3, wherein the change of the encoding format

is effected on the basis of the alternative encoding format.

5. (Previously Presented) The method of claim 1, wherein the information about

the encoding capabilities includes data embodied on a computer readable medium about encoding formats supported by the respective communication terminal.

(Previously Presented) The method of claim 1 wherein the change

(Previously Presented) The method of claim 1, wherein the change of the encoding format is effected with the purpose of establishing an optimal encoding

configuration on the basis of compatible encoding formats between the communication

terminals on both sides

7. (Previously Presented) The method of claim 1, further comprising the steps of

changing the encoding format currently in use and notifying the second transcoder

arranged with the second communication terminal on the distant side thereof prior to

entering an operational state bypassing the transcoding operations.

8. (Previously Presented) The method of claim 4, wherein a bypassing protocol

is aborted if incompatible protocol versions are used by the first and second communication terminal on the two sides and/or, in the case of compatible protocol

versions, the encoding format is changed in a contact state of the bypassing protocol

that is followed by an operational state in which the transcoding operations are

bypassed.

9. (Previously Presented) The method of claim 1, wherein the information about

the encoding format used by a terminal includes a codec type that is used to encode

speech signals into an encoded data representation.

10. (Previously Presented) The method of claim 1, wherein the information on the

encoding capabilities of the second terminal on the distant side is used to look up a

subset of encoding formats supported by the second terminal on the distant side,

wherein that subset is compared with the encoding formats supported by the first terminal on the local side and wherein the best encoding format in common is chosen to

initiate bypassing of the transcoding operations.

11. (Previously Presented) The method of claim 1, wherein the information about

the encoding format currently in use and about the encoding capabilities are included in

a message embodied in a computer readable medium requesting the initiation of a

bypassing protocol or a message acknowledging such a request.

12. (Previously Presented) The method of claim 11, wherein the information

about the encoding capabilities is appended in the form of one or more individual

information blocks to the message.

13. (Previously Presented) The method of claim 12, wherein a first appended

block includes the version of a bypassing protocol and an indicator that indicates if the first appended block is followed by a second appended block that includes a list of

supported encoding formats.

14. (Previously Presented) The method of claim 1, wherein the method is

performed in context with setting up of a tandem free operation (TFO) between the two

communication terminals.

15. (Previously Presented) The method of claim 1, wherein at least one of the

communication terminals uses at least one encoding format in the form of a codec type to encode speech signals into an encoded data representation and wherein messages

are sent between the two transcoders to determine if the communication terminals have

are sent between the two transcoders to determine if the communication terminals have at least one codec type in common and if this is the case to establish a data connection

between communication terminals without having the need to insert transcoding

functions into a signal path between the communication terminals.

16. (Previously Presented) The method of claim 14, wherein between the transcoders first messages are exchanged that contain the information about the

encoding format currently used by the respective communication terminal and that

contain the further information about the encoding capabilities of the respective

communication terminal or transcoder.

17. (Previously Presented) The method of claim 14, wherein a second message

embodied on a computer readable medium is exchanged between the transcoders as a response to the first message if both reported codec types match or regardless of such

a match.

18. (Previously Presented) A computer program product comprising program

code portions for performing the steps of claim 1 when the computer program product is

embodied on a computer readable medium and loaded into and executed by one or

more processors within computing units of the communication network.

19. (Cancelled)

 (Previously Presented) A device for processing signals in context with the initiation of the bypassing of a pair of transcoding operations performed in series by a

first transcoder arranged together with a first communication terminal on a local side of

a communication network and by a second transcoder arranged together with a second

communication terminal on a distant side of the communication network, said device

comprising:

a component for receiving information, in a first initial request to bypass

transcoding operations, about an encoding format currently in use by the second communication terminal on the distant side and about encoding capabilities of the

second communication terminal on the distant side and about encoding capabilities of the

bypassing protocol supported by the respective transcoder; and,

a component for transmitting information, in a second initial request to bypass

transcoding operations, about an encoding format currently in use by the first terminal

on the local side and about encoding capabilities of the first terminal on the local side, the information about the encoding capabilities of the first terminal including the version

of a bypassing protocol supported by its respective transcoder, to enable on one or on

both sides a change of the encoding format currently in use prior to initiating the

bypassing of the transcoding operations.

21. (Previously Presented) A transcoder including the device of claim 20.

 (Previously Presented) The transcoder of claim 21, further comprising a component comprised therein for evaluating local and distant encoding information and

for controlling the change of the encoding format.

23. (Previously Presented) A communications system including the transcoder of

claim 21 and a controller for evaluating local and distant encoding information and for

controlling the change of the encoding format.

24. (Previously Presented) The communications system of claim 23, wherein the

controller is included in a BTS or a BSC

25-28. (Cancelled).

\* \* \*

# **EVIDENCE APPENDIX**

None.

# RELATED PROCEEDINGS APPENDIX

None.